

Appl. No.: 10/774,821
Reply to Office Action of: 03/30/2007

Amendments to the Drawings:

The attached sheet of drawings includes corrected Figs. 1-20 in accordance with 37 CFR 1.121(d).

Attachment: Replacement Sheets

REMARKS

In regard to section 1 of the office action, applicants have attached replacement sheets including formal drawing figures.

In regard to section 2 of the office action, MPEP 606 states that the "title should be brief but technically accurate". Applicants respectfully submit that the title ("Portable Electronic Device with Camera") is sufficient and in accordance with the MPEP.

Claims 1-4, 7, 8, and 10 were rejected under 35 U.S.C. §102(e) as being anticipated by Nishio (US 7,077,663). Claims 5, 6, 19-23, and 33-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishio (US 7,077,663) in view of Miyake (US 6,836,669). Claims 11, 24-30, and 32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishio (US 7,077,663) in view of Ting (US 2003/0070288). Claims 9 and 12-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishio (US 7,077,663) in view of Yamada (US 6,768,516). Claim 31 was rejected under 35 U.S.C. §103(a) as being unpatentable over Nishio (US 7,077,663) in view of Ting (US 2003/0070288) and Miyake (US 6,836,669). The examiner is requested to reconsider these rejections. •

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). It is submitted that Nishio fails to teach each and every element as set forth in claim 1 for at least the reasons described below.

Applicants have amended claim 1 to recite, *inter alia*, "wherein the plurality of different heights extends along a majority of a height of the camera". In contrast, Nishio merely discloses a camera module 21 comprising a module body 22, a lens portion 23, and a connector 25 comprising contact pins 26. "A plurality of parallel contact pads 24 is formed at a lower half portion of each of the four side faces of the module body 22" (see Figs. 1B, 1C, 3 and col. 4, lines 47-53). The "contact pads 24 are brought into press-contact with the contact projections 26b of the contact pins 26" (see col. 5, lines 12-15, and Fig. 3). Since the pads 24 are located at the lower half portion of the module body 22, the camera is limited to the insertion contact at the lower half of the camera as the "attachment of the camera module 21 to the connector 25 is thus completed as shown in Fig. 3" (see col. 5, lines 14-16). Thus, Nishio fails to teach a stepless movement height connection which allows the camera to slide relative to the electrical connector along a first axis to allow positioning of the camera relative to the electrical connector at one of a plurality of different heights along the first axis, wherein the plurality of different heights extends along a majority of a height of the camera, as claimed in amended claim 1. Accordingly, claim 1 is patentable over the art of record and should be allowed.

Though dependent claims 2-11 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 1. However, to expedite prosecution at this time, no further comment will be made.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicants have amended claim 12 to recite, *inter alia*, "electrical conductors extending along a rear end of the housing and along a first lateral side of the housing ... and a camera printed wiring board stationarily connected to the rear end of the housing and coupled to the electrical conductors". In contrast, Nishio merely discloses a camera module 21 comprising a module body 22 and a lens portion 23 with electrical conductors 24 on a bottom half of the module body 22. The only printed wiring board mentioned in Nishio is one "on which the connector 25 is mounted" (see col. 5, lines 6-7). There is no disclosure or suggestion in Nishio to add a camera printed wiring board to the camera module 21. Yamada discloses a CMOS camera system 20 comprising a stepped wiring board 21, an image pick-up semiconductor 4, an image processing semiconductor 9, and a flexible wiring board 5. "Reference numeral 29 designates an electrical junction between the stepped wiring board [housing] 21 and the flexible wiring board 5 (see Fig. 2 and col. 4, lines 35-37). There is no disclosure or suggestion that the electrical junction 29 extends along a rear end of the stepped wiring board 21 and along a first lateral side of the stepped wiring board 21. Just the opposite, in order to perform its connection function, it would appear that the electrical junction 29 must be located between the bottom side of the stepped wiring board 21 and the top side of the flexible wiring board 5 as contacts

of an electrical connector along a lateral side are not disclosed. Neither Nishio nor Yamada teach or suggest electrical conductors which extend along a rear end of the housing and along a first lateral side of the housing ... and a camera printed wiring board stationarily connected to the rear end of the housing and coupled to the electrical conductors as claimed in applicants' claimed invention.

Additionally, applicants submit that there is no suggestion to combine the references as the examiner is attempting to do (at least not until after reading applicants' patent application). In particular, Nishio teaches that the "attachment of the camera module 21 to the connector 25 is thus completed as shown in Fig. 3". It would appear that if an image processing semiconductor 9 (as in Yamada) was added to the rear end of the module body 22 by way of connectors 27, 28 (as in Yamada), the contact pads 24 would not be aligned with the projections 26b of the contact pins 26 (see Fig. 3). Instead, the image processing semiconductor 9 and the connectors 27, 28 would be disposed in the area of, and aligned with, the contact projections 26b. This would result in no electrical contact between the camera module 21 and the electrical connector 25. Therefore, the proposed modification would render the cited prior art unsatisfactory for its intended purpose.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. (see MPEP 2143.01, page 2100-98, column 1).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (see MPEP 2143.01, page 2100-98, column 2). A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is **not sufficient** to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. (see MPEP 2143.01, page 2100-99, column 1) Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). >See also Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.)

In the present case, there is no teaching, suggestion, or motivation, found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art, to provide electrical conductors which extend along a rear end of the housing and along a first lateral side of the housing ... and a camera printed wiring board stationarily connected to the rear end of the housing and coupled to the electrical conductors, as claimed in amended claim 12. The features of claim 12 are not disclosed or suggested in the art of record. Therefore, claim 12 is patentable and should be allowed.

Though dependent claims 13-18 contain their own allowable subject matter, these claims should at least be allowable due

to their dependence from allowable claim 12. However, to expedite prosecution at this time, no further comment will be made.

Applicants have amended claim 19 to recite, *inter alia*, "a camera receiving area adapted to receive a camera therein and make electrical contact at one of a plurality of different locations along a majority of a height of the camera inside the camera receiving area".

In contrast, Nishio merely discloses a connector 25 comprising a chamber 25a and a plurality of contact pins 26. The connector 25 is mounted on a wiring board (see col. 5, lines 5-6) and therefore can only receive the camera module 21, and make electrical contact, at the location of the contact pads 24 which are formed at a lower half portion of the module body 22 and the "attachment of the camera module 21 to the connector 25 is thus completed as shown in Fig. 3" (see col. 5, lines 14-16). Miyake discloses a portable telephone comprising an image pick up device 1 and a circuit board 2. Lead portions 104 are attached between the image pick up device 1 and the circuit board 2. The lead portions 104 extend from a single location along the sides of the image pick up device 1 (see Figs. 1, 2A, and 2B). Neither Nishio nor Miyake teach or suggest a camera receiving area adapted to receive a camera therein and make electrical contact at one of a plurality of different locations along a majority of a height of the camera inside the camera receiving area as claimed in applicants' claimed invention.

Additionally, applicants submit that there is no suggestion to combine the references as the examiner is attempting to do (at least not until after reading applicants' patent application). In the present case, there is no teaching, suggestion, or motivation, found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art, to provide a camera receiving area adapted to receive a camera therein and make electrical contact at one of a plurality of different locations along a majority of a height of the camera inside the camera receiving area as claimed in amended claim 19. The features of claim 19 are not disclosed or suggested in the art of record. Therefore, claim 19 is patentable and should be allowed.

Though dependent claims 20-23 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 19. However, to expedite prosecution at this time, no further comment will be made.

Applicants have amended claim 24 to recite, *inter alia*, "wherein the camera comprises electrical conductors on the housing, and wherein the electrical conductors extend along a majority of the height of the camera". Similar to the arguments above with respect to claim 1, Nishio merely discloses a camera module 21 comprising a module body 22 and a lens portion 23 with electrical conductors 24 on a bottom half of the module body 22. Ting discloses a CMOS image sensor 310 mounted on a circuit substrate 410. The electrical connection between the image sensor 310 and the circuit substrate 410 "is achieved by SMT with the interconnection solder balls" (see

paragraph [0017])). There is no disclosure or suggestion to provide electrical conductors on the image sensor 310 which extend along a majority of the height of the image sensor 310. Neither Nishio nor Ting teach or suggest a camera comprising electrical conductors on the housing, and wherein the electrical conductors extend along a majority of the height of the camera as claimed in applicants' claimed invention.

Additionally, applicants submit that there is no suggestion to combine the references as the examiner is attempting to do (at least not until after reading applicants' patent application). In the present case, there is no teaching, suggestion, or motivation, found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art, to provide a camera which comprises electrical conductors on the housing, and wherein the electrical conductors extend along a majority of the height of the camera as claimed in amended claim 24. The features of claim 24 are not disclosed or suggested in the art of record. Therefore, claim 24 is patentable and should be allowed.

Though dependent claims 25-32 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 24. However, to expedite prosecution at this time, no further comment will be made.

Applicants have amended claim 33 to recite, *inter alia*, "making electrical connection between the electrical connector and electrical conductors extending along a majority of a height of a first lateral side of the camera inside the slot

of the electrical connector". Similar to the arguments above with respect to claims 1 and 19, neither Nishio nor Miyake teach or suggest the features or method of claim 33. Therefore, claim 33 is patentable and should be allowed.

Though dependent claims 34-36 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 33. However, to expedite prosecution at this time, no further comment will be made.

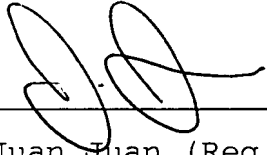
Applicants have amended claim 37 to recite, *inter alia*, "wherein the plurality of different heights extends along a majority of a height of the camera". Similar to the arguments above with respect to claims 1 and 19, neither Nishio nor Miyake teach or suggest the features of claim 37. Therefore, claim 37 is patentable and should be allowed.

Though dependent claim 38 contains allowable subject matter, this claim should at least be allowable due to its dependence from allowable claim 37. However, to expedite prosecution at this time, no further comment will be made.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issue remain, the examiner is invited to call applicants' attorney at the telephone number indicated below.

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Respectfully submitted,



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6/29/2007

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CERTIFICATE OF MAILING

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June 29, 2007

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Jodie Wroniak

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